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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Daniel J. Powers et al.

Art Unit: 3762

Serial No.: 09/993,841

Examiner: Nichole R Kramer

Filed : November 5, 2001

For : CARTRIDGE HAVING A POWER SOURCE AND ELECTRODE  
PAD,  
DEFIBRILLATOR HAVING A RECHARGEABLE BATTERY,  
DEFIBRILLATOR SYSTEM HAVING ONLY ONE REPLACEABLE  
COMPONENT, AND RELATED METHODS

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on Nov. 29, 2005  
(Date of Deposit)

W. Brinton Yorks, Jr.

Name of applicant, assignee, or  
Registered Representative

W B Yorks Jr  
(Signature)

11/29/05  
(Date of Signature)

Hon. Commissioner of Patents  
Washington, D.C. 20231

DECLARATION OF PRIOR INVENTION UNDER 37 CFR §1.131

Dear Sir:

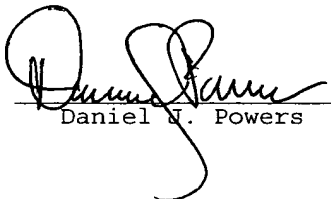
We, Daniel J. Powers and James K. Russell, the inventors  
in the above-captioned patent application, do hereby declare  
as follows:

We conceived of our invention prior to October 2, 2001.  
Attached as Exhibit A is a one-page invention disclosure  
prepared by one of us to describe our invention. This  
disclosure bears the date it was prepared, the date it was  
witnessed, and the date it was received by the Agilent Legal  
Dept., the original assignee of our application. These dates  
are all within eight days from the earliest date to the latest  
date. These dates, which are all prior to October 2, 2001,  
have been redacted from the enclosed copy.

The disclosure describes an example of our invention, which is "a relatively low cost primary battery (AA Alkaline) in the pads/battery cartridge to maintain a charge on a rechargeable battery (preferably LiION) internal to the AED." The disclosure also provides four exemplary claims of what we believe our invention is, such as 1) which describes "A Defibrillator electrode system consisting of pads [electrodes], and battery contained in a single package." In claim 3) we recite that "the battery internal to the pads cartridge is used to refresh the charge on a rechargeable battery internal to the AED."

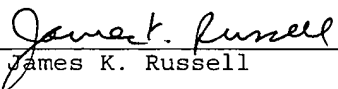
Our invention disclosure was reviewed by an Agilent Technologies patent attorney and targeted to be filed as a patent application. During the period October 2, 2001 to November 5, 2001 our patent application was being diligently prepared by our patent attorney, Mr. Bryan Santarelli, as evidenced by the 22 pages of text, 8 sheets of drawings, executed declaration and assignment, and information disclosure statement including five documents filed with the USPTO on November 5, 2001 and of record in this case. We executed the declaration and assignment when the application was in its final form for filing on October 31, 2001.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
Daniel J. Powers

Date:

11/29/05

  
James K. Russell

Date:

11/29/05

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Invention Disclosure

Title: Disposable Pads/Battery Cartridge Use Model.

Problems Solved by Invention

- 1.) Service of product involves replacement of 1 disposable item (pads).
- 2.) Pads Life and Battery Life are closely linked.
- 3.) Battery in Cartridge is not critical to operation of defibrillator in use. Therefore failure modes of battery and pads are decoupled.

Description of Invention

An AED requires a long standby life with low maintenance requirements. Prior art implementations of AED's incorporate a separate battery and electrode system. This increases the complexity of the servicing of the product, and requires that the battery used be capable of long standby life and high power delivery at the same time. Other prior art disclosures discuss marrying the two concepts (Defib and AED battery) into a single cartridge. While this solves the maintenance issue, it substantially increases the cost of the disposable cartridge. This invention discloses using a relatively low cost primary battery (AA Alkaline) in the pads/battery cartridge to maintain a charge on a rechargeable battery (preferably LiION) internal to the AED. This allows the disposable cartridge to still be relatively inexpensive. The other benefits of this invention are that since both Alkaline batteries and Pads are sensitive to heat (as it affects shelf-life), the Pads now have a built in indicator of being stored in excessive environments.

Claims:

- 1.) A Defibrillator electrode system consisting of pads, and battery contained in a single package. The package providing external connections to an AED to supply power from the pads battery, and to make contact with the pads internal to the pads package.
- 2.) Claim 1 where the battery internal to the pads cartridge is used to power all functions of the defibrillator.
- 3.) Claim 1 where the battery internal to the pads cartridge is used to refresh the charge on a rechargeable battery internal to the AED.
- 4.) Claim 1 where the battery internal to the pads cartridge can be used in concert with the battery internal to the defibrillator to power all functions of the defibrillator.

Invented by: Dan Powers

Witnessed by: